

Toward integrated medical resource policies for Canada: 10. Information creation and dissemination

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This is the tenth in a series of articles¹⁻⁹ based on the report *Toward Integrated Medical Resource Policies for Canada*,* prepared for the Federal/Provincial/Territorial Conference of Deputy Ministers of Health.¹⁰⁻¹² In this article we briefly assess the adequacy of the information available for the management of physician resources and review the main recommendations of the full report regarding the creation and dissemination of information.

During our interviews we heard as much about information deficits as we heard about any other single issue. The problem is that "more and better information" is required on just about any aspect imaginable of medical care or physician resource policy. Such a general plea is not particularly helpful, however: it is both vague and unrealistic. Important as they are, the creation and dissemination of information are not costless activities. To reach agreement on priorities for new information, the specific content or operational details of new initiatives and whether such initiatives would be worth their cost seems near impossible. Furthermore, no amount of information will satisfy all parties at the

policy table, nor will all parties interpret the same information in the same manner.

Information alone will not create policies or solve problems. Unrealistic expectations of information are often rampant and can be dangerous: they tend to paralyse policy development unnecessarily. Frequently, the most that more or better information will do is to sharpen policy debates or perhaps allow refinements to policy instruments. There is no information system that will make social choices, provide important value judgements or determine fundamental policy directions; these must continue to come from the leaders and representatives involved. Yet insufficient information is often claimed as a way of avoiding explicit discussion of such issues as what a society's needs are, which ones should be met and how best to meet them.

None of this should be interpreted as an argument for reducing the amount and dissemination of information; indeed, we feel that increased activity is warranted, but it needs to be focused. We discuss several situations in which information or better dissemination of it would assist in policy development, improve the effectiveness, appropriateness or efficiency of medical care and allow a more informed public discussion of resource allocation in the physician sector.

Postgraduate training

We see a clear need, as part of a national

*The full report (in two volumes) is available for \$75 (including postage and GST) from Barbara Moore, Centre for Health Services and Policy Research, University of British Columbia, at the reprint requests address, or fax (604) 822-5690, or from Lynda Marsh, Centre for Health Economics and Policy Analysis, McMaster University, Rm. 3H26, Health Sciences Centre, 1200 Main St. W, Hamilton, ON L8N 3Z5, or fax (416) 546-5211.

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strategy, for the collective (federal, provincial and territorial) development of information systems to guide the determination of the numbers and mix of postgraduate training positions. One important component of this might be a forecasting model that would use detailed data on the existing supply and activities of specialists to project specialty-specific supply.

We emphasize that no amount of information by itself will determine the appropriate number or mix of training positions, but considerable information could be brought to bear to ensure that such decisions align more closely with public needs and priorities. The information might be developed at the community level or by each province or territory. It would need to be aggregated for the purposes of determining a national mix of postgraduate positions and then disaggregated when the mix of positions is allocated across regions and training centres. A national agency or coordinating committee could be responsible for the latter phase.

We deliberately avoid detailing how the regional needs for each type of specialty might be estimated, because the development of the necessary information systems would not be a trivial undertaking. Information on substitution potential, referral patterns, the age distribution and activity levels of existing practitioners, the demographic structure of the populations and other relevant factors would need to be created and married. Regions would need to establish "requirement guidelines" that took into account information on the prevalence and incidence of illnesses amenable to medical intervention, the "scopes of capability" of various health care professionals and the capacity of physicians within each specialty for patient or illness load.

Existing organizations that might play important roles include the new National Health Information Council, the CMA, the Association of Canadian Medical Colleges and the Canadian Post-M.D. Education Registry — organizations that already have significant expertise in database development. The National Physician Database, sponsored jointly by the federal, provincial and territorial governments, and the newly established National Coordinating Committee for Postgraduate Medical Training are other examples. However, no single agency would be able or willing to do this job alone; even a joint effort would likely fall short of meeting these information needs. There will have to be a collaboration, among not only the provinces but also the stakeholders, that will draw on a disparate set of information sources (some of which already exist in certain parts of the country, others of which do not exist anywhere). Some collaborative activity has already begun — for example, by the Canadian Medical Forum's Research Group on Physician Resources in

Health and its predecessor, the Subcommittee on Manpower.¹³ The next steps should involve widening consultation and collaboration with other stakeholder groups and emphasizing the linkage or coordination of existing data sets and the identification of gaps in them.

Effectiveness, appropriateness and efficiency of medical care

Increased emphasis on applied health services research is needed to generate information on the effectiveness, appropriateness and efficiency of medical care and on other ways of improving health. The health care sector uses vast amounts of resources, yet far too little is known about even routine daily procedures and services, let alone new or emerging technologies or "competing" instruments for improved population health, such as income support or early childhood development programs. The effectiveness, appropriateness and efficiency of care currently given or proposed should be viewed as basic management information to be available to providers, funding agencies and the public.

Research on alternative clinical, managerial and organizational approaches to improving health is often complex and costly, not only in terms of dollars but also in terms of scarce human resources. If no decision-making body intends to use the information, there seems little point in funding the research. This underlines the need for close collaboration between research funding agencies and public and professional policymakers.

Again, there have been important recent developments in this area, with the establishment of the federal Coordinating Office for Health Technology Assessment and a number of provincial counterparts. Here we see potential dangers of duplication and a clear need for the national office to play a coordinating role.

It is critical that the conduct of research and the dissemination and use of the information not be seen as isolated activities of specialized groups. On the contrary, they need to become part of the ethos of the health care sector and its key actors. Indeed, during our interviews representatives of the medical profession and the medical education establishment were among the most vocal in stressing the need to balance basic biomedical research with research into the effectiveness, appropriateness and efficiency of clinical services and the determinants of health.

Health status of the population

This is another example of underdeveloped basic management information, although Canada does not stand alone in this respect. Again, relative

to the large resource commitments to health care delivery far too little is known about the health deficits or functional disabilities of the population and about how they vary across communities, change over time and relate to various determinants, including (but going well beyond) the availability of medical care. Since we do not have a clear picture of population needs it is difficult to evaluate the impact of policy changes on those needs.

A national strategy needs to be developed in this area. In addition to initiatives already under way or in place in Ontario and Quebec a series of regional health or disability surveys should be done periodically that are detailed enough to support investigations into the broader determinants of health, monitor key changes in health care needs and clarify the relation between health deficits and the use of different types of health care resources.

Although such surveys are expensive most of the costs vary according to the number of surveys done and the number of interviews undertaken. In contrast, there are high fixed costs associated with the prior, developmental work. There seem to be clear opportunities, as part of a national strategy, for provinces not yet involved in such efforts to build on the developmental work that has already taken place in Quebec and Ontario and for those two provinces, in turn, to avail themselves of any advances in such areas as questionnaire design and field techniques that might emerge from work in other provinces. In addition, the regional surveys should be coordinated with any national surveys, such as the Canada Health Survey. Consistency and compatibility for linkage will be critical characteristics of policy data.

Context of practice

For potential medical students, undergraduates and postgraduate trainees we see considerable value in a national information resource that would provide data on (a) regional physician supply by age, sex, specialty and area of practice, (b) supply of complementary resources (e.g., institutional facilities, other types of health care personnel and other community resources and infrastructure) and (c) other information deemed useful for decisions about specialty or practice location. The national resource should include the demographic, socioeconomic and health profiles of regional populations. It should also supply information on emerging developments, such as quality-assurance and maintenance-of-competence programs of hospitals or licensing authorities, in order to provide prospective physicians and trainees with a complete picture of the context of practice.

Communication with the public

The Canadian public will play an important role, directly or indirectly, in supporting and approving any significant policy change in the health care sector; however, it typically does not receive appropriate information with which to make informed decisions.

The public participates in several important ways: as patients and prospective patients, as taxpayers and as citizens with preferences about the fundamental characteristics of their society. Social consensus is important in determining which needs will be met publicly and to what extent. Perceptions of what the public is willing to pay, and for which activities, are critical in the setting of budgets for the health care system and its subsystems. Moreover, public attitudes, expectations and knowledge influence when, how and why the health care system is used.

Important questions are before the public, regardless of whether the public is aware of them. For example, "What value do Canadians place on health care use for which the expected benefits, though positive, are quite small, especially in relation to other social uses of the same resources or expenditures?" and "How will Canadians reconcile resource allocation decisions and policies based on a population health perspective with their own individual wants and values?"¹⁴

Our concern is that not only are there problems with the amount and type of information that the public receives but also this information issue itself does not appear to be receiving as much attention as it deserves, despite frequent recommendations by recent provincial commissions, health professional organizations, committees and task forces.^{15,16} In some areas of relevance to the physician resources sector (e.g., ethical issues about the extension of life) public discussion is increasing; in others, however, it is not. People remain generally naïve about the limits and the precision of medicine. They are also relatively uninformed about issues of cost and effectiveness and about alternative delivery models and alternative uses of public resources, even within their own communities.

To date, the job of informing the public done by all parties — including providers, governments, funding agencies, educators and researchers — has been somewhere between "nonexistent" and "clearly inadequate." The information that the public might like to have is lacking, the mechanisms for transmitting the information are underdeveloped or absent, and the established processes for soliciting the views of the public and using the information in short-term and long-term allocative decision making are either nonexistent or crude and sporadic.

What information the public would like and

what should ideally and in practice be provided are worthy of increased attention. Important candidates for inclusion in a public information package would be lay descriptions of updated evidence on health determinants and of clinical interventions that are effective (and those that are not effective or may be suspect) and for whom, as well as self-help guides intended to make consumers more intelligent users of health care services. Information on the allocation of public funds and on the cost-effectiveness of existing and alternative patterns and models of health care delivery should also be included.

We do not wish to underestimate the difficulty of improving communication with the public, nor do we have any grand scheme for creating a fully informed population. Questions abound. How does the public form its attitudes about health and health care? What are the most effective vehicles for communicating new information or for changing attitudes? Can educators and researchers become better at communicating their knowledge and findings to lay audiences? How? Can public reporting and discussion of health care policy ever be depoliticized, given the media's penchant for sensationalism and the temptation for frontline providers* to make their individual cases for more resources or desired policy changes directly to the public through the media (as well as to their patients during office contacts)? Who will (and should) play the role of the "voice on the other side" of these stories in an attempt to balance discussion and separate statements of fact from those of values, preference or self-interest? How involved does the public really wish to be anyway, in which issues and through what vehicles?

We are at a very early and rudimentary stage in understanding and improving communication with the public about general and specific matters of health and health care policy. Perhaps the first step is to accord the subject itself a high priority and attempt to answer questions such as those just posed. This seems particularly important, perhaps even urgent, if the frequently recommended decentralization of decision making to regional authorities and the increased involvement of consumers in the governance of health care institutions are to be important parts of health-care policy.

From information to action

There are undoubtedly many other specific areas in which more or better information would be desirable and useful. An important characteristic

shared by the ones we have highlighted is that the information needs are system-wide and have the potential to inform both individual choices and collective decisions in the numerous specific policy areas covered in this series. This is one of the reasons why the creation and dissemination of information appears as a policy avenue in our analytic framework for physician resource policy.³

It is not just that more and better information is required to manage physician resources but also that the considerable information already available should be better used. This will require improved incentives and structures for all parties to integrate the available information into their everyday decisions and behaviour.

Efforts to improve the creation, dissemination and use of information can go forward concurrently with the policy directions suggested in the full report and in the other articles in this series. It is our view and the consensus of those whom we interviewed and consulted that in most of the specific policy areas pertaining to physicians, the directions and objectives for change have been clear for some time. Improved information will assist in the crafting of sensitive and more precise policies to achieve those objectives, but less than ideal information should not be cause for delay.

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References

1. Barer ML, Stoddart GL: Toward integrated medical resource policies for Canada: 1. Background, process and perceived problems. *Can Med Assoc J* 1992; 146: 347-351
2. Stoddart GL, Barer ML: Toward integrated medical resource policies for Canada: 2. Promoting change — general themes. *Ibid*: 697-700
3. Idem: Toward integrated medical resource policies for Canada: 3. Analytic framework for policy development. *Ibid*: 1169-1174
4. Barer ML, Stoddart GL: Toward integrated medical resource policies for Canada: 4. Graduates of foreign medical schools. *Ibid*: 1549-1554
5. Stoddart GL, Barer ML: Toward integrated medical resource policies for Canada: 5. The roles and funding of academic medical centres. *Ibid*: 1919-1924
6. Idem: Toward integrated medical resource policies for Canada: 6. Remuneration of physicians and global expenditure policy. *Can Med Assoc J* 1992; 147: 33-38
7. Barer ML, Stoddart GL: Toward integrated medical resource policies for Canada: 7. Undergraduate medical training. *Ibid*: 305-312
8. Idem: Toward integrated medical resource policies for Canada: 8. Geographic distribution of physicians. *Ibid*: 617-623
9. Idem: Toward integrated medical resource policies for Canada: 9. Postgraduate training and specialty certification. *Ibid*: 999-1005
10. Idem: *Toward Integrated Medical Resource Policies for Canada*. Prepared for the Federal/Provincial/Territorial Conference of Deputy Ministers of Health, 1991

*Outside Canada "providers" may include those providing insurance. The current campaign by private insurers in the United States to "inform" the public about the Canadian system is a revealing example of stakeholder behaviour.¹⁷

11. Idem: *Toward Integrated Medical Resource Policies for Canada: Background Document*, U of British Columbia (HPRU discussion paper 91:6D), Vancouver, and McMaster U (CHEPA working paper 91-7), Hamilton, Ont, 1991
12. Idem: *Toward Integrated Medical Resource Policies for Canada: Appendices*, U of British Columbia (HPRU discussion paper 91:7D), Vancouver, and McMaster U (CHEPA working paper 91-8), Hamilton, Ont, 1991
13. Watanabe LM: Panel discussion. In *Proceedings of the Royal College of Physicians and Surgeons 11th Biennial Conference of Specialties*, RCPSC, Ottawa, 1992: 29-35
14. Woodward CA, Stoddart GL: Is the Canadian health care system suffering from abuse? A commentary. *Can Fam Physician* 1990; 36: 283-289
15. Ontario Health Review Panel: *Toward a Shared Direction for Health in Ontario*, Ont Ministry of Health, Toronto, 1987
16. Task Force on the Allocation of Health Care Resources: *Health — a Need for Redirection*, CMA, Ottawa, 1983
17. War of words: US insurers on the attack. *Consum Rep* 1992; 57: 587

Conferences

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5th Annual CMA Leadership Conference • 5^e Conférence annuelle de l'AMC sur le leadership

Feb. 25-27, 1993 / du 25 au 27 févr. 1993

L'Hôtel Westin Hotel, Ottawa

CMA Meetings and Travel Department / Département des conférences et voyages de l'AMC, PO Box/CP 8650, Ottawa, ON K1G 0G8; (613) 731-9331 or/ou 1-800-267-9703, fax (613) 523-0937

126th Annual Meeting of the Canadian Medical Association • 126^e Assemblée générale annuelle de l'Association médicale canadienne

Aug. 22-26, 1993 / du 22 au 26 août 1993

Skyline Plaza Hotel and Calgary Convention Centre, Calgary

127th Annual Meeting of the Canadian Medical Association • 127^e Assemblée générale annuelle de l'Association médicale canadienne

Aug. 14-19, 1994 / du 14 au 19 août 1994

Montreal

CMA Meetings and Travel Department / Département des conférences et voyages de l'AMC, PO Box/CP 8650, Ottawa, ON K1G 0G8; (613) 731-9331 or/ou 1-800-267-9703, fax (613) 523-0937

Other Conferences • Conférences diverses

Dec. 3, 1992: North York General Hospital 2nd Annual Surgical Update

Ramada Renaissance — Don Valley, Toronto

CME credits available.

Gayle Willoughby, conference coordinator, North York General Hospital, 116-4001 Leslie St., North York, ON M2K 1E1; (416) 756-6538, fax (416) 756-6740

Dec. 3-4, 1992: Society of Obstetricians and Gynaecologists of Canada Ontario CME Programme Toronto Hilton

Topics: "Menopause Symposium" and "Changing Faces of Obstetrics"

Ms. Danie Cousineau, education coordinator, Society of Obstetricians and Gynaecologists of Canada, 102-1785 Alta Vista Dr., Ottawa, ON K1G 3Y6; (613) 521-4192, fax (613) 521-4314

Dec. 9, 1992: Valves and Values — Implications for Cardiovascular Nurses: 8th Provincial Workshop Harbour Castle Westin, Toronto

Janine Monahan, professional education representative, Canadian Council of Cardiovascular Nurses (Ontario division), 65 Faircrest Blvd., Kingston, ON K7L 4V1; (613) 541-0826

Dec. 10-11, 1992: Contemporary Management of Cardiovascular Disease (followed by satellite symposium on "The Elderly and Cardiovascular Disease," Dec. 12, 1992)

Study credit available.

Harbour Castle Westin, Toronto

Rosemary Leach, manager, professional education, Heart and Stroke Foundation of Ontario, 4th Floor, 477 Mount Pleasant Rd., Toronto, ON M4S 2L9; (416) 489-7100, ext. 340

Jan. 10-12, 1993: 3rd Primary Care Research Conference: "Challenges in Practice-Based Research"

Hotel Nikko Atlanta

Third Primary Care Research Conference, Ste. 410, N Tower, 7315 Wisconsin Ave., Bethesda, MD 20814; (301) 229-3002, fax (301) 229-9553

Jan. 20-24, 1993: APICON-93 — 48th Joint Annual Conference of the Association of Physicians of India

Hotel Ashok, Chanakyapuri, New Delhi-21, India
Dr. Y.P. Munjal, organizing secretary, APICON-93, 8A/14, W.E.A. Karol Bagh, New Delhi-110 005, India; telephone 011-91-11-5729624 or 011-91-11-5719867, fax 011-91-11-5755060

Jan. 28-31, 1993: 19th Annual Predoctoral Education Conference

Hotel Inter-Continental New Orleans

Program Department, Society of Teachers of Family Medicine, PO Box 8729, Kansas City, MO 64114; 800-274-2237 or (816) 333-9700, ext. 4510

Jan. 29-30, 1993: Sport Med '93 — Annual Sports Medicine Symposium (sponsored by the Ontario Medical Association's Section on Sports Medicine)

Holiday Inn Crowne Plaza, Toronto Airport
Ms. Erna Walker or Ms. Susan Teslak, meetings planning, Ontario Medical Association; (416) 599-2580 or 800-268-7215

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